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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,203	04/07/2000	Hiromasa Ikcyama	450108-02011	9613
20999	7590	08/27/2004		
FROMMER, LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER NGUYEN, CUONG TRUNG	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 08/27/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/545,203

Applicant(s)

IKEYAMA, HIROMASA

Examiner

LUONG T NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the form and legal phraseology often used in patent claims, such as "means" should be avoided.

Correction is required. See MPEP § 608.01(b).

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

DIGITAL STILL CAMERA WHICH CAN PERFORM IMAGE SIZE ADJUSTING BY  
A LINEAR INTERPOLATION AND A CURVE INTERPOLATION.

***Claim Objections***

5. Claims 1-2 are objected to because of the following informalities:

Claim 1 (line 1), "A imaging device" should be changed to --An imaging device--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 (line 3) recites the limitation "the" in "the supplied image data". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (US 6,618,082) in view of Kimura (US 5,301,266) in view of Ducarouge et al (US 5,617,155).

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Regarding claim 1, Hayashi et al. discloses an imaging device comprising photographing means (CCD imager 14, figure 1, column 2, lines 37-45); size-of-image-to-be-displayed adjusting means for performing image size adjusting processing on the image data outputted from said photographing means to produce image data to be displayed and outputted (second signal processing circuit 30, figure 1, column 2, lines 56-65); size-of-image-to-be-recorded adjusting means for performing image size adjusting processing on the image data outputted from said photographing means to produce image data to be recorded on a recording medium (CPU 28 compress (image size adjusting) image data into JPEG format and then records compressed image data in memory card 46 (figure 1, column 3, lines 18-26); display data output means for outputting the image data for display (LCD 34, figure 1, column 2, lines 56-65); recording means for recording the image data (memory card 46, figure 1, column 3, lines 18-26).

Hayashi et al. fails to specifically disclose performing image size adjusting processing by a linear interpolation on the image data outputted from said photographing means to produce image data to be displayed. However, Kimura teaches an image interpolation circuit 4, which performs enlargement or reduction processing by using a linear interpolation filter, outputs image data to be displayed on display 7 (figure 5, column 4, lines 15-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi et al. by the teaching of Kimura in order to provide an imaging device which can perform interpolation processing of a high spatial resolution within a short period of time without degrading an MTF characteristic and decreasing the spatial resolution of an image (column 2, lines 40-46).

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Hayashi et al. and Kimura fail to specifically disclose performing image size adjusting processing by a curve interpolation on the image data outputted from said photographing means to produce image data to be recorded on a recording medium. However, Ducarouge et al. teaches one type of compression method (image size adjusting) could be a curve interpolation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi et al. and Kimura by the teaching of Ducarouge et al. in order to give an image of the inside contour of the frame (real contour), column 9, lines 49-54. This lets a good quality image to be recorded.

10. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (US 6,618,082) in view of Kimura (US 5,301,266) and Ducarouge et al (US 5,617,155) further in view of Matsumura (US 6,762,792).

Hayashi et al., Kimura and Ducarouge et al. fail to disclose wherein said size-of-image-to-be-displayed adjusting means and said size-of-image-to-be-recorded adjusting means use a line memory, which is used for the image size adjusting processing by the linear interpolation and the image size adjusting processing by the curve interpolation, in common. However, Matsumura discloses the using a line memory 3 for interpolation circuit 4 (figure 19, column 1, lines 12-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi et al., Kimura and Ducarouge et al. by the teaching of Matsumura in order to obtain a desired zoom image data (column 1, line 25).

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11. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saito (US 5,463,419) discloses image signal processing device for thinning images.

Hayashi (US 5,734,427) discloses high resolution electronic still camera with an electronic viewfinder for displaying a reduced image.

Nohda (US 6,295,087) discloses image pickup apparatus having an interpolation function.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN LN  
8/21/04

  
NGOC-YEN VU  
PRIMARY EXAMINER